# **ALLEN COUNTY**

# (Allen County Water Service Area Map)

- Estimated 1999 population of 16,600--81% on public water
- Estimated 2020 population of 20,000--82% on public water
- 400 miles of water lines, with plans for 0.2 additional miles
- Estimated funding needs for public water 2000-2005--\$10,000
- Estimated funding needs for public water 2006-2020--\$0

Allen County had an estimated population of 16,650 (6,844 households) in 1999, with a projected population of 19,976 (8,753 households) in the year 2020. Some 5,250 households (approximately 81%) were served by public water systems. With the exception of an area in the southeastern part of the county, nearly all households in the county currently have access to public water. Those not on public water rely on private wells. An additional 100 households will be added to public water by the year 2020.

Maintaining the high level of public water service in the face of a 33 percent population growth will require a significant upgrade of treatment facilities.

Estimated Costs - Proposed Projects, 2000-2005

COUNTY/System		New		Rehab	Source	Treatment	Tanks/	Total
		Customers					Pumps	
	Miles	Number	Cost in \$1000	In	in	in \$1000	in	in \$1000
				\$1000	\$1000		\$1000	
ALLEN								
SCOTTSVILLE WATER	0.2	100	10					10
DEPARTMENT								
ALLEN COUNTY	0.2	100	10				·	10
TOTAL								

### PUBLIC WATER SYSTEMS

The majority of the residents of Allen County are presently provided water by two systems: the Scottsville Water Department and the Allen County Water District. A small portion of western Allen County is served by White House, Tennessee and a small section in the east is served by Glasgow Water District and Fountain Run Water District.

# WATER SERVICE AREAS ALLEN COUNTY Kentucky

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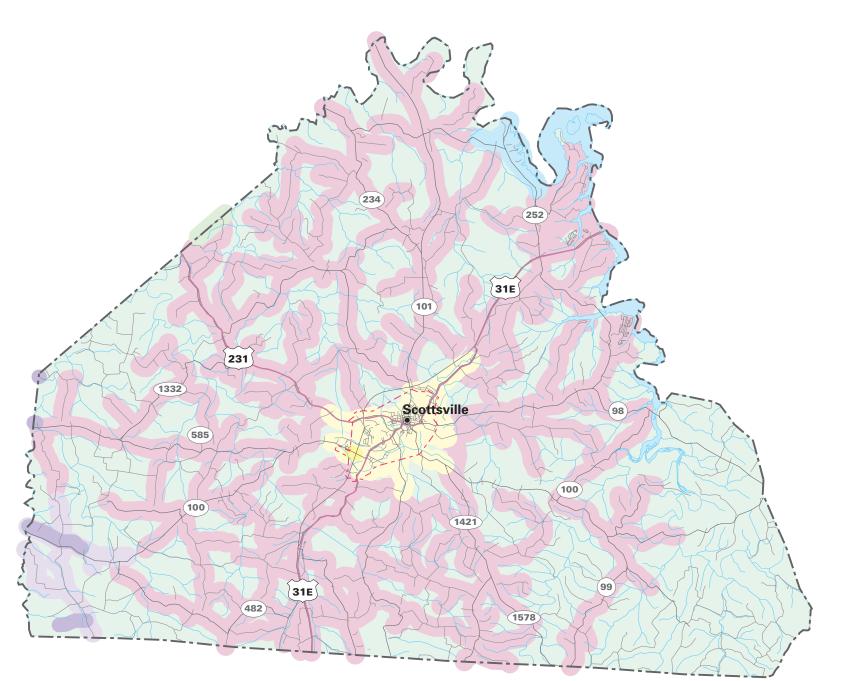








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## **WATER SERVICE STATUS BY OWNER**



# **ALLEN COUNTY WATER DISTRICT**

PWSID:	0020956
System Type:	.COMMUNITY
Owner Type:WA	TER DISTRICT
Surface Source:	
Purchase Source: SCOTTS	SVILLE PLANT
Well Source:	
Sells Water to:	
Treatment Plant Capacity (MGD):	
Percent Daily Average Production:	0.00
Total Tank Storage Capacity (gallons):	1,053,000.00
Total Service Connections:	
Number of Employees:	
Treatment Operator Class:	2D
Distribution Operator Class:	
Customer Rate for 1,000 Gallons:	
O/M costs 1997:	
O/M costs per Service Connection:	
Net Revenue 1997:	
Total Water Produced 1997 (gallons):	0.00
Water Sold 1997 (gallons):	
Unaccounted-for Water 1997 (%):	7.95

Allen County Water District purchases its water from the Scottsville Water Department, described in the Allen County Water Supply Plan as an adequate supply of water for future needs. The District currently serves 3,000 households in rural Allen County. The District currently has a contract to purchase a maximum of 1,500,000 gallons of water per month from the Scottsville Water Department and has an average daily usage of 700,000 gallons. The storage system for the District consists of five tanks, which have a combined storage capacity of 1,053,000 gallons. The calculated charge for 5,000 gallons of treated water (residential usage) is \$25.00. Overall system losses average 8%. Allen County Water District has nine employees, of whom, three are certified to operate the distribution system.

The need for water service expansion in rural Allen County is not as great as in other counties. Approximately 95% of the households in the Allen County Water District have treated water available to them. The only areas that are lacking service are those located on the outer edge of the county where there are not enough residents per square mile to justify the cost of expansion to these areas. Another problem cited with distributing water to these areas is the high volume and pressure needed to provide water for all the residents in the

Allen County Water District. The areas with the most growth, however, are in the rural areas of the county and eventually treated water will be needed in these areas.

### **SCOTTSVILLE WATER DEPARTMENT**

PWSID:	
Purchase Source:	
Well Source: Sells Water to:ALLEN COUNTY WATER DISTRICT	
Treatment Plant Capacity (MGD):	
Percent Daily Average Production:	)
Total Tank Storage Capacity (gallons):	)
Total Service Connections:	
Number of Employees:5.00	)
Treatment Operator Class:	
Distribution Operator Class:3A	
Customer Rate for 1,000 Gallons:	
O/M costs 1997:Not available	
O/M costs per Service Connection:Not available	ļ
Net Revenue 1997:Not available	ļ
Total Water Produced 1997 (gallons):Not available	•
Water Sold 1997 (gallons):	
Unaccounted-for Water 1997 (%):	

The Scottsville Water Department gets its water from the nearby Barren River Reservoir, described in the Allen County Water Supply Plan, as an adequate supply of raw water for future needs. The Water Department currently serves 2,238 households in and around Scottsville, as well as 230 commercial and 12 industrial customers. Additionally, the Water Department sells treated water to Allen County Water District. The Water Department operates a water treatment plant, which can produce 1,500,000 gallons per day. On an average day the plant produces approximately 732,000 gallons per day. The average amount sold to the Allen County Water District is 625,000 gallons per day. Approximately 90% of the plant capacity is being utilized and will probably need upgrading within the next 20 years. The Departments water storage consists of three tanks. The total storage capacity of the Department is 1,850,000 total gallons. The calculated charge for 5,000 gallons of treated water is \$15.75. The Scottsville Water Department employs five persons, three of whom are licensed water treatment plant operators.

Scottsville Water Department currently serves 85% of the total households in its service area. The other 15% are either on wells or do not wish to buy water. Only a small percentage does not have access to the system. As a whole, the system does not need to expand. Instead, it needs to upgrade the treatment plant and replace some of the older lines. Currently the water treatment plant in Scottsville is operating at 90% of its maximum capacity and many feel that this will be inadequate by the year 2020. Scottsville will continue a steady growth rate and eventually the system will no longer serve the population adequately.

### PRIVATE DOMESTIC SYSTEMS

About 3,000 people in Allen County rely on private domestic water supplies: about 1,700 on wells, and 1,300 on other sources.

In the uplands of northwestern Allen County and in the lowlands of the southern reaches of Trammel Creek and the Barren River and its major tributaries, more than three-quarters of the drilled wells are adequate for a domestic supply. Yields as high as 50 gpm have been reported from wells penetrating large solution channels which are a common feature in limestone rich areas such as are found in Allen County. In approximately 80% of the county most wells are inadequate for domestic use except a few wells in lowlands areas bordering streams which yield enough water for a domestic supply.

Numerous springs with flows ranging from a few gallons per minute too as high as 20,000 gpm are found in the county but are prominent in the limestone beds along the Barren River and its tributaries.